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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/741,894	12/22/2000	Yoshifumi Suzuki	201166US2	6556

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OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C.
1940 DUKE STREET
ALEXANDRIA, VA 22314

EXAMINER

SEFCHECK, GREGORY B

ART UNIT	PAPER NUMBER
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2662

DATE MAILED: 04/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/741,894

Applicant(s)

SUZUKI ET AL.

Examiner

Gregory B Sefcheck

Art Unit

2662

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 June 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-30 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

- In regards to Claims 1-30,

Claims 1-30 contain several unclearly defined terms that make the claims indefinite. For example, "higher-rank stations of nodes" is indefinite. Generally, throughout claims 1-30, reference to "stations" of "nodes" and how a "rank" of the stations is established is not clearly defined.

- In regards to Claims 1, 11, and 18-21,

The making a predetermined number of bits of the source and destination addresses "fixed" is indefinite. It is unclear what is meant by "fixed" in the claims since these "fixed" addresses are shown to be converted. Figs. 3A-8B show how the supposed "fixed" bits of the source and destination addresses are converted as the packet is routed through the network.

- In regards to Claims 3-7 and 13-17,

Reference to "the own address/station/apparatus" in claims 3-7 and 13-17 is indefinite. It is not clearly shown how the own address/station/apparatus is used to determine routing decisions. If "own" refers to the current location of the packet, it is unclear how the address relates to the source and destination addresses of the received packet and how "converting" is performed in relation to these addresses. Differentiation among the multiple addresses being modified within a packet, in general, is unclear.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-30 are rejected under 35 U.S.C. 102(b) as being anticipated by Wada et al. (US005517618A), hereafter Wada.

- In regards to Claims 1-3, 9-13, 21-23, 29, and 30

Wada discloses a node interfacing multiple networks and method of communicating packets having a destination and source address in a communication system (Abstract; Fig. 11; claim 1/11/13/14/16-21 – communication method/node in

communication system employing a packet having a source and destination address; claims 19/20 - node provides an interface with the other network; claim 9/10/29/30 – when the destination terminal belongs to another network, the source terminal transmits the packet having an address given to the destination terminal as the destination address thereof).

Wada discloses an unchanged (fixed) address for packet transmission and reception (Col. 1, lines 55-57; claim 1/11/21 – making a predetermined number of bits of the source and destination address fixed).

Referring to Fig. 6-9, Wada shows gateway (repeating node) that utilizes a table for converting the source and destination address of the packet to an updated/migration address and transfers the packets (Col. 17, lines 30-67; claim 1/11/21 – repeating node/part converting the fixed address of the source address into an address of a higher-rank station of said repeating node; claim 1/11/21 – repeating node/part converting the fixed address of the destination address into an address of a higher-rank station of a last repeating node for a destination terminal and transferring the packet; claim 2/12/22 – repeating node/part converts the fixed address of the source address into an address of a node having a table of an address of a higher-rank station of a last repeating node for each terminal, when the address of the higher-rank station of the last repeating node for the destination terminal is not known and transfers the packet; claim 3/13/23 – node/converting part having the table converts the own address in the destination address into the address of the higher-rank station of the last repeating node for a destination terminal and transfers the packet; claim 9/29 – the repeating

node/converting part converts the fixed address in the source address into the address of the higher-rank station of said repeating node and transfers the packet to a gateway station which provides an interface with the other network; claim 9/19/29 – gateway station/converting part converts the address of the higher-rank station into the fixed address and transfers the packet into another network; claim 10/20/30 – gateway station/converting part converts the fixed address in the destination address of the packet into the address of the higher-rank station of the last repeating node for the destination terminal and transfers the packet).

- In regards to Claims 4, 5, 14, 15, 24, and 25,

Wada discloses a node interfacing multiple networks and method of communicating packets having a destination and source address in a communication system that covers all limitations of the parent claims.

Wada shows that the packet is transferred without a need for corresponding migration addresses when the address in the packet coincides with the current address for the destination stored in (Figs. 10a/b and 13; claim 4/14/24 – higher-rank station of the repeating node/transferring part transfers the packet without changing the source address when the address of the higher-rank station in the source address coincides with the address of the own station; claim 4/14/24 – higher-rank station/converting part converts the address of the higher-rank station in the source address into the address of the own station when the address of the higher-rank station in the source address does

not coincide with the address of the own station and transfers the packet; claim 5/15/25 – higher-rank station of the repeating node/instructing part instructs the higher-rank station having the source address originally written in the packet to transfer a packet addressed to said source terminal to the own station, when the address of the higher-rank station in the source address does not coincide with the address of the own station; claim 5/15/25 – higher-rank station of the repeating node/instructing part further instructs a node having the table of the address of the higher-rank station of the last repeating node for each terminal to update said table).

- In regards to Claims 6-8, 16-18, and 26-28,

Wada discloses a node interfacing multiple networks and method of communicating packets having a destination and source address in a communication system that covers all limitations of the parent claims.

Wada discloses that the gateway transfers the packet without changing the destination address when the address coincides with the current address for the destination (Col. 17, lines 30-50; claim 6/16/26 – higher-rank station of the last repeating node/transferring part transfers the packet without changing the destination address when the address of the higher-rank station in the destination address coincides with the address of the own station and no transfer instructions are given for the destination terminal; claim 17 – determining part determines whether or not an

address of a higher-rank station in the destination address of a packet does not coincide with an address of the own apparatus).

The gateway converts the address to the updated/migration destination address when the destination address of the packet does not coincide with the current address for the destination (Col. 17, lines 30-50; claim 6/16/26 – higher-rank station of the last repeating node/converting part converts the address of the higher-rank station of the destination address into an address of a higher-rank station of the destination of the instructed transfer when the address of the higher-rank station in the destination address coincides with the address of the own station and transfer instructions are given for the destination terminal, and transfers the packet; claim 7/17/27 – higher-rank station of the last repeating node/transferring part transfers the packet when the address of the higher-rank station in the destination address does not coincide with the address of the own station/apparatus; claim 8/18/28 – the last repeating node/converting part converts the addresses of higher-rank stations in the source and destination address into the fixed addresses and transfers the packet to the destination terminal

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

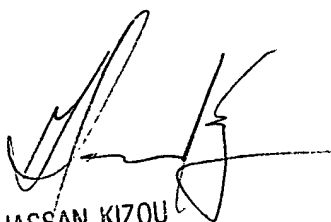
- La Porta et al. (US006654359B1) discloses wireless access to packet-based networks
- Casper et al. (US006188675B1) discloses a system and method for self-identifying and configuring the nodes of a network
- Oppenheimer et al. (US005282270A) discloses network device location using multicast
- Perkins (US005159592A) discloses network address management for a wired network supporting wireless communication to a plurality of mobile users

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gregory B Sefcheck whose telephone number is 703-305-0633. The examiner can normally be reached on 8:00am-4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hassan Kizou can be reached on 703-305-4744. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

GBS
4-23-2004



HASSAN KIZOU
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600